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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Marvin Moser

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EXAMINER

KIM, JUNG W

ART UNIT

PAPER NUMBER

2132

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/847,709	Applicant(s) MOSEY, MARVIN	
	Examiner Jung Kim	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 56-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 56-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to the amendment filed on August 10, 2006.
2. Claims 56-68 are pending.

Response to Amendment

3. The objection to claim 66 is withdrawn as the amendment overcomes the objection.
4. The 112/2nd paragraph rejections are withdrawn as the amendment overcomes the 112/2nd paragraph rejections.

Response to Arguments

5. Applicant's arguments regarding the prior art rejections have been fully considered but they are not persuasive.
6. Applicant's argument as presented in the "Remarks", under the section "Paragraph 12". A. (i) [p. 5-6], are deficient for two reasons. First, applicant argues, "Korn at col. 3, lines 15-18 discloses such hypertext object would reference an original script with appended hash commands, not an encrypted script. The hashed commands and the original script subsequently may be encrypted to hide a public key protecting the hashed commands appended to the script. Korn does not teach a worker skilled in the art to store an encrypted script." However, it appears that applicant's reading of

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Korn ignores more relevant portions of the disclosure. On col. 2:25-35 and col. 3:15-18,

Korn teaches

In one embodiment of the invention, a script in a World Wide Web page ("Web page", "Web document", or "HyperText Markup Language (HTML) document") is hashed and encrypted. A control in the Web page, such as ActiveX, decrypts and hashes the script to verify the script has not been altered or tampered with, before executing or causing to execute the script. In this manner, one can serve to a client web pages that contain interactive content or that execute local applications in a secure fashion. The described embodiment involves a script that may be invoked by a Web browser application, or more particularly, by a control in a Web page downloaded by the Web browser application.... The script, including the signed hashed values and public key, if present, may be encrypted using a symmetric key 107 to provide a second level of encryption.

Clearly, contrary to applicant's allegations, Korn expressly discloses storing an encrypted script ["a script in a World Wide Web page ('Web page', 'Web document', or 'HyperText Markup Language (HTML) document') is hashed and encrypted."]

Second, the argument is piecemeal and it does not consider the teachings of W3C. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). W3C discloses incorporating a hypertext object within an HTML page to invoke remotely located objects to enable greater flexibility to store and retrieve programs and data sets. Section 13.3 and 13.4. It is the combined teachings of Korn and W3C that disclose the limitation in question.

7. With respect to applicants arguments under section Paragraph 12:A(ii) and (iii), applicant suggests the following: "Korn at col. 3, lines 35-37 discloses a user visiting a web server [and the user] downloads a web page containing interactive content. Korn does not disclose a user sending a request to a web server," and "[t]here is no basis in Korn for the web server to receive a URL and fetch a modified web page. The user completes this task by visiting the web site and downloading the web page containing interactive controls." It appears applicant is making the distinction that the step of "visiting a web server" or "visiting the web site and downloading the web page" are distinct from the actions of "a user sending a request to a web server" and "the web server to receive a URL" to fetch a web page. However, applicant supplies no rationale as to why such a distinction exists. The invention of Korn is describing a transaction between a web server serving HTML web pages with embedded controls in the web page to decrypt an encrypted script, and a web browser, which receives the modified web page from the server. In this transaction, applicant's alleged distinction does not exist. A user visiting a web server to download a web page containing interactive content *via a web browser* (Korn, col. 2:33-35) necessarily sends a request to a web server. For example, when a user visits a web site and downloads a web page, he or she enters a URL into their browser to "visit" the site, and the web server receives this URL request. This step is equivalent to "sending a request to a web server" and the "web server to receive a URL."

8. With respect to applicant's arguments under section Paragraph 12:A(iv-viii), again, these are piecemeal arguments and they do not consider the teachings of Korn as modified by W3C. The teachings of the two references and the reasons to combine are supplied below in the rejections.

9. With respect to applicant's arguments under section Paragraph 12:A(ix), the teaching of the prior art is considered in terms of its whole. There is nothing in the prior art or in the Specification of applicant's invention to suggest that because Korn discloses additional features beyond what is claimed by applicant, Korn is irrelevant. On the contrary, Korn is relevant because it teaches those features specifically claimed by the applicant.

Further, in reply to applicant's argument that Korn modified by W3C is inoperative, applicant does not provide a sufficient rational for this argument. Applicant's claim that the modification is inoperative due to performing unnecessary steps is not a sufficient basis for being inoperable. In general, an invention can perform superfluous steps and still remain operable. Rather, the performance of unnecessary steps is an issue that suggests an undesirableness to combine two references. With regard to the desirability to combine the two references, the motivation to combine the two references is addressed both above and below. Furthermore, in reply to applicant's claim that the modification is inoperative due to the absence of cryptographic key functions in encrypting and decrypting hash commands and the script, a runtime environment to decrypt the hash command and the script, and the absence of a

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comparator to decrypt the script, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Moreover, the combination of Korn and W3C are readily combinable, contrary to applicant's allegation. W3C discloses, inter alia, means to incorporate references to a remote object into an *HTML page*. This means is suggested as a modification within a web page separate from the concerns of the environmental setup to express the web page. There is nothing in the art to suggest that incorporating the teachings of W3C into the scheme of Korn would render the invention inoperable. Hence, because Korn discloses encryption and decryption techniques on a web script in the context of an HTML web page, as well as runtime environments for these cryptographic procedures, and storage and retrieval of these encrypted web scripts, the combination of Korn and W3C cover the limitation of the art.

For the aforementioned reasons, applicant's arguments against the rejection of claim 56 are not persuasive.

Applicant's arguments with regard to the rejections of claims 57-61 and 67-68 are unconvincing for the same reasons state above. Hence, these claims remain rejected under the prior art of record.

In reply to applicant's argument that the prior art does not suggest modifying Korn to perform concurrent tasks in the manner described by claims 62-64, examiner disagrees. The rejections below are based on the combined teachings of Korn, W3C and Hall, wherein Hall explicitly discloses performing concurrent tasks for the purpose of maintaining efficiency and convenience. Moreover, the examples by Hall illustrate multi-tasking based on discrete tasks (pgs. 752-760, listings 14.4, 14.10 and 14.12), which suggest multi-tasking individual steps. Because Korn and W3C combined disclose the individual steps of applicant's claimed invention, and Hall provides motivation to perform separate steps in a concurrent manner, the prior art of record disclose the inventions of claims 62-66.

For these reasons, the applicant's arguments are not persuasive and the claims remain rejected under the prior art of record.

It is noted that applicant states "[t]he rejection [to the claims] contravenes the comments made by the Examiner and Supervisory Examiner at the Interview conducted September 21, 2005 that describing multiple downloads in the claims would overcome the cited art." (Remarks, p. 12) As a point of clarification, no such statement was made by either the examiner or the supervisor. During the interview of September 21, 2005, applicant's representative suggested the aforementioned amendments to the claims to overcome the references of the prior art. The response of both the examiner and the supervisor was that consideration to the proposed amendments would be given to an RCE due to the fact that the amendments are new issues that would require further

search and consideration. This is consistent with the interview summary mailed on 9/21/06.

Claim Rejections - 35 USC § 103

10. Claims 56-61, 67 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korn U.S. Patent No. 6,880,083 (hereinafter Korn) in view of W3C HTML 4.01 Specification (hereinafter W3C).

11. As per claim 56, Korn discloses a method executable in a computer for restricting access to a script in a computer comprising the steps of:

- a. storing a modified web page in a web server including a hypertext object having a reference to a decryption program (col. 2:14-30 and lines 34-35; 3:32 and lines 37-38);
- b. storing an encrypted script in a web server and storing a decryption program on a server capable of decrypting the encrypting script (Korn, col. 2:14-30; 3:15-20, 30-33);
- c. sending a first URL request to the web server for the modified web page by a web browser in a computer (3:36);
- d. receiving the first URL request at the web server and fetching the modified web page for a first download to the web browser, wherein a user's browser downloads the encrypted script and the decryption program (Korn, 3:36-38);

- e. decrypting the encrypted script by the run-time environment to produce a script for transmittal to and execution by the web browser (Korn, 3:59-60; an applet runs in a JRE).
2. Korn does not expressly teach the hypertext object including a reference to the encrypted script, nor does Korn explicitly disclose the steps of sending a second and third URL request and receiving the second and third URL request as recited in claim 56. W3C teaches incorporating a hypertext object within an html page to invoke remotely located objects that perform dynamic tasks, including functions defined by applets; furthermore, the hypertext object includes parameters to identify the location of remote data read in by the objects to perform the dynamic tasks (section 13.3, especially section 13.3.1 "Rules for rendering objects" and 13.3.2 "Object initialization: the PARAM element"; section 13.4). In this prior art, objects such as applets are rendered in the following order: a user agent first renders the object (pg. 8 of section 13.3.1 "Rules for rendering objects," "The user agent must first try to render the object"), and when the object is rendered, the user agent searches for PARAM elements as parameters for the objects (pg. 12 of section 13.3.2 "Object initialization: the PARAM element," "When an OBJECT element is rendered, user agents must search the content for only those PARAM elements that are direct children and "feed" them to the OBJECT") In one example, a hypertext object in a modified web page (the <OBJECT> tag in an html page) references the object using a URL ("<OBJECT classid="http://www.gifstuff.com/gifappli" [first line of pg. 12 of section 13]) and also references the run-time data to "feed" into the object as a URI

("value="./images/elvis.gif" [4th line of pg. 12 of section 13]). It would be obvious to one of ordinary skill in the art at the time the invention was made to store a hypertext object including a reference to the encrypted script (OBJECT tag) in a modified web page and a reference to the decryption program (PARAM attributes), whereby access for restricting access to the script includes the following steps: sending a second URL request to the web server initiated by the user for the decryption program (Korn, 3:38: "clicking on an applet"); receiving the second URL request at the web server and fetching the decryption program for a second download to the web browser (classid and codebase attributes define URIs to request and retrieve the object); retrieving the URL reference to the encrypted script in the modified web page by the web browser; sending a third URL request to the web server initiated by a runtime environment for the encrypted script; and receiving the third URL request by the web server and fetching the encrypted script for a third download to the run-time environment (PARAM attribute value is a URI designating a resource [last line of page 11 of section 13]; applets are rendered and run in a JRE). One would be motivated to do so since the invocation of remote objects and remote data sets using hypertext enables access to dynamic programs and data sets from a remote location, which enables greater flexibility to store and retrieve programs and data sets (W3C, *ibid*). The aforementioned cover the limitations of claim 56.

3. As per claim 57, the rejection of claim 56 under 35 USC 103(a) as being unpatentable over Korn in view of W3C is incorporated herein. (*supra*) In addition, Korn

and W3C further teach or suggest detecting in the first download by the web browser a URL reference in the modified web page to a decryption program (Korn, col. 3:37-38; W3C, pg. 9 of section 13, "classid").

4. As per claim 58, the rejection of claim 56 under 35 USC 103(a) as being unpatentable over Korn in view of W3C is incorporated herein. (supra) In addition, Korn and W3C further teach or suggest detecting in the second download by the web browser a URL reference to an encrypted script in the modified web page (Korn, col. 3:37-38; W3C, pg. 12 of section 13, "PARAM" and "value="/>").

5. As per claim 59, the rejection of claim 56 under 35 USC 103(a) as being unpatentable over Korn in view of W3C is incorporated herein. (supra) In addition, Korn and W3C further teach or suggest invoking the decryption program with the reference to the encrypted script by the web browser for execution by the run-time environment. (Korn, col. 3:37-38, an applet runs in a JRE)

6. As per claim 60, the rejection of claim 56 under 35 USC 103(a) as being unpatentable over Korn in view of W3C is incorporated herein. (supra) In addition, Korn and W3C further teach or suggest the web browser is a multi-tasking browser (Korn, col. 1:12-13; 2:35: IE is a multi-tasking browser).

7. As per claim 61, the rejection of claim 56 under 35 USC 103(a) as being unpatentable over Korn in view of W3C is incorporated herein. (supra) In addition, Korn and W3C further teach or suggest the run-time environment is a multi-tasking run-time environment (applets run in an JRE, which is a multi-tasking run-time environment).

8. As per claims 67 and 68, they are claims corresponding to claims 56-59, and they do not teach or define above the information claimed in claims 56-59. Therefore, claims 67 and 68 are rejected as being unpatentable over Korn in view of W3C for the same reasons set forth in the rejections of claims 56-59.

12. Claims 62-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korn in view of W3C, and further in view of Hall CORE Web Programming, Chapter 14, "Concurrent Programming using JAVA Threads" (hereinafter Hall).

9. As per claims 62-66, the rejection of claim 60 under 35 USC 103(a) as being unpatentable over Korn in view of W3C is incorporated herein. (supra) Neither Korn nor W3C explicit disclose or suggest launching concurrent tasks by the multi-tasking browser when the web page is loaded into the web browser; wherein the first concurrent task sends the second URL request to the web server for the decryption program; wherein the second concurrent task sends the third URL request to the web server for the encrypted script; wherein the multi-tasking runtime environment suspends to wait for the multi-tasking runtime environment to detect that the multitasking web browser has

stored the encrypted script; wherein the multi-tasking browser triggers the multitasking runtime environment to synchronize the first and the second concurrent task by detecting the availability of the encrypted script. However, multitasking is a notoriously well-known means in the art to configure tasks within an application to enable the benefits of concurrent programming. For example, Hall discloses utilizing threads within an applet run on a Netscape Browser to perform concurrent tasks for the purpose of efficiency and convenience (pg. 749, introduction and pgs. 750-760; pgs. 770). Hall further discloses arbitrating contention for resources by locking code for a given thread and notifying other thread when the lock is released by the given thread; this process ensures that the locked code is available only when the thread locking the code is finished executing the code, which prevents improper execution of the code (pg. 760-762; pg. 766, "notify()" and "notifyAll()") In the case of the tasks for submitting the URLs for the decryption program and the encrypted script, these are atomic tasks that do not require a necessary order for proper operation, and hence, concurrent submission of the URL for the decryption program and encrypted script are obvious variants in view of Hall. Moreover, the step of suspending the runtime environment to detect multitasking web browser has stored the encrypted script, wherein the multitasking browser triggers the runtime environment to synchronize the first and second concurrent task by detecting the availability of the encrypted script is an obvious enhancement since decryption of the script can only proceed when the encrypted script is available locally within the browser. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to launch concurrent tasks by the multi-tasking

browser when the web page is loaded in to the web browser; wherein the first concurrent task sends the second URL request to the web server for the decryption program; wherein the second concurrent task sends the third URL request to the web server for the encrypted script; wherein the multi-tasking runtime environment suspends to wait for the multi-tasking runtime environment to detect that the multitasking web browser has stored the encrypted script; wherein the multi-tasking browser triggers the multitasking runtime environment to synchronize the first and the second concurrent task by detecting the availability of the encrypted script. One would be motivated to do so to perform the task more quickly in a multithreaded environment and for the sake of convenience. (Hall, pg. 749) The aforementioned cover the limitations of claims 62-66.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Communications Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JK

Jk
September 12, 2006

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